IN THE CLAIMS:

1. (Previously Presented) A syringe comprising:

a body; and

a plunger movably disposed within the body, the plunger comprising:

a cylindrical wall having an inner surface and an outer surface, the inner surface defining a retaining shoulder formed and extending along the circumference of the cylindrical wall; and

a plurality of inwardly projecting flanges fixedly disposed on and radially spaced along the inner surface of the cylindrical wall, the plurality of inwardly projecting flanges extending in a longitudinal direction proximal to the retaining shoulder,

wherein the inwardly projecting flanges are continuously supported in the longitudinal direction by the inner surface of the cylindrical wall.

2-10. (Cancelled)

11. (Previously Presented) The fluid injection system of Claim 13 wherein the plurality of inwardly projecting flanges are radially spaced along the inner surface of the cylindrical wall and extend in a longitudinal direction proximal to the retaining shoulder.

12. (Previously Presented) The syringe of Claim 1 wherein the plurality of flanges are evenly spaced along the cylindrical wall.

13. (Previously Presented) A fluid injection system comprising:

an injector comprising:

a housing; and

a drive member at least partially disposed within the housing, the drive member comprising:

at least one retaining member; and

one or more outwardly extending flange members; and

a syringe comprising:

a body; and

a plunger movably disposed within the body, the plunger comprising:

a cylindrical wall having an inner surface defining a retaining shoulder formed along an axial length thereof; and

a plurality of inwardly projecting flanges fixedly extending from the retaining shoulder and continuously supported by the inner surface in a longitudinal direction,

wherein each of the inwardly projecting flanges is spaced along the inner surface of the cylindrical wall;

wherein the at least one retaining member on the drive member of the injector is adapted to engage the retaining shoulder on the cylindrical plunger wall to enable the drive member to retract the plunger within the body of the syringe; and

wherein the plurality of inwardly projecting flanges on the cylindrical plunger wall are adapted to engage the one or more outwardly extending flange members on the drive member when the syringe body is rotated about its longitudinal axis, the one or more outwardly extending flange members operable to cause the at least one retaining member on the drive member to disengage the retaining shoulder on the cylindrical wall of the plunger upon rotation of the syringe body.

14-15. (Cancelled)

16. (Previously Presented) The fluid injection system of Claim 13 wherein the plurality of flanges are evenly spaced along the inner surface of the cylindrical wall.

17-21. (Cancelled)